

AMENDMENTS TO THE CLAIMS

1. (PREVIOUSLY PRESENTED) A method of managing overwrite on an optical disc write once, comprising:

writing replacement-recording data, which is requested to be overwritten in a specified area of the disc where recording is completed, in a rear portion of a user data area of the disc;

recording first information on a last logical sector number of the user data area, which is changed in accordance with the replacement recording operation, in a management area of the disc; and

recording second information indicating positions of the specified area and the replacement-recorded area portion, in the management area of the disc,

wherein the first information and the second information are recorded at a same update time after the writing of the replacement-recording data is performed.

2. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the last logical sector number of the user data area is obtained by updating information on a previous last logical sector number of the user data area.

3. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the last logical sector number of the user data area is recorded as new management information while information on a previous last logical sector number of the user data area is maintained as it is.

4. (ORIGINAL) The method of claim 1, wherein the optical disc write once is a dual-layer type optical disc write once, to which the method is applied in the same manner.

5. (ORIGINAL) The method of claim 4, wherein the dual layers have user data areas consecutively given like one recording layer.

6. (PREVIOUSLY PRESENTED) A method of managing overwrite on an optical disc write once, comprising:

writing replacement-recording data, which is requested to be overwritten in a specified area of the disc where recording is completed, in an area preceding an outer spare area of the disc;

extending the outer spare area as large as a size of a replacement-recorded area;

recording first information on a last logical sector number of a user data area, which is changed in accordance with the extension of the outer spare area, in a management area of the disc; and

recording second information indicating positions of the specified area and the replacement-recorded area, in the management area of the disc,

wherein the first information and the second information area recorded at a same update time after the writing of the replacement-recording data is performed.

7. (PREVIOUSLY PRESENTED) A method of managing overwrite on an optical disc write once, comprising:

writing replacement-recording data, which is requested to be overwritten in a specified area of the disc where recording is completed, in an outer spare area of the disc;

determining whether to extend the outer spare area in consideration of a size of a replacement-recorded area; and

recording first information on a last logical sector number of a user data area, which is changed in accordance with the determination of the extension of the outer spare area, in a management area of the disc; and

recording second information indicating positions of the specified area and a replacement-recorded area of the outer spare area, in the management area of the disc,

wherein the first information and the second information are recorded at a same update time after the writing of the replacement-recording data is performed.

8. (PREVIOUSLY PRESENTED) The method of claim 7, wherein whether to extend the outer spare area is determined before the replacement recording operation.

9. (PREVIOUSLY PRESENTED) The method of claim 7, wherein whether to extend the outer spare area is determined during initialization of the disc.

10. (PREVIOUSLY PRESENTED) A method of managing overwrite on an optical disc write once having a plurality of recording layers, comprising:

selectively writing replacement-recording data, which is requested to be overwritten in a specified area of the disc where recording is completed, in a user data area of the respective recording layer of the disc;

recording first information on a last logical sector number of the user data area of the respective recording layer, which is changed in accordance with the replacement recording operation, in a management area of the disc; and

recording second information indicating positions of the specified area and a replacement-recorded area of the user data area, in the management area of the disc,

wherein the first information and the second information are recorded at a same update time after the writing of the replacement-recording data is performed.

11. (PREVIOUSLY PRESENTED) The method of claim 10, wherein the last logical sector number of the user data area of the respective recording layer is obtained by updating

information on a previous last logical sector number of the user data area of the respective recording layer.

12. (PREVIOUSLY PRESENTED) The method of claim 10, wherein the last logical sector_number of the user data area of the respective recording layer is recorded as new management information while information on a previous last logical sector number of the user data area of the respective recording layer is maintained as it is.

13-17. (CANCELLED)

18. (CURRENTLY AMENDED) An apparatus for recording/reproducing an optical disc write once, comprising:

a recording device ~~for judging~~ configured to judge whether a specified area is an already recorded area or a non-recorded area; ~~[[,]]~~ and if it is judged that the specified area is the already recorded area, writing to write data, requested to be overwritten in the specified area, in a replacement area of a data area ~~and recording; to record~~ first information on a last logical sector number of a user data area ~~[[,]]~~; ~~and recording to record~~ second information indicating positions of the specified area and the replacement area,

wherein the first information and the second information are recorded at a same update time after the writing operation is performed, and the last logical sector number of the user data area is changed by the writing operation.

19. (CURRENTLY AMENDED) A computer-readable recording medium, comprising:

a data area including a user data area being usable as a replacement area, wherein the replacement area is assigned when writing data requested to be overwritten in a specified area of the user data area; and

at least one management area for storing first information including a last logical sector number of the user data area and second information indicating positions of the specified area and the replacement area,

wherein the first information and the second information ~~area~~are recorded at a same update time after the writing operation is performed, and the last logical sector number of the user data area is changed by the assigned replacement area.